Summer 2021

Addressing Hidden Barriers to Follow Up Healthcare: A Community Referral Pilot Project

Amber Williams
awilliams51@gardner-webb.edu

Addressing Hidden Barriers to Follow Up Healthcare:

A Community Referral Pilot Project

Amber Williams

A project submitted to the faculty of

Gardner-Webb University Hunt School of Nursing

in partial fulfillment of the requirements for the degree of

Doctor of Nursing Practice

2021

Submitted by:	Approved by:
Amber Williams, MSN, RN Student Name, Credentials	Robin L Lang, DNP, MBA, RN Faculty Name, Credentials
July 12, 2021 Date	July 12, 2021 Date

Acknowledgements

I would like to thank my project chair, Dr. Robin Lang for the dedication and brilliance that was offered to this project through her expertise. I would like to thank all the staff and administration with Gardner-Webb University's Doctor of Nursing Practice program. Through their love and values, I have grown immeasurably. I would like to thank Dr. Linda O'Boyle for her years of dedication and mentorship to my personal growth. I would like to thank Crystal Horton and Baptists on Mission for their generosity and love for others as they fulfill Christ's mission of service here on earth.

I express gratitude for my family for their dedication, support, and sacrifices as I have worked long hours to research and learn. Thank you, Tanner, for believing in mommy even when I could not believe in myself. Most importantly, I would like to thank Jesus for his guidance and wisdom to see the world through His eyes.

Addressing Hidden Barriers to Follow Up Healthcare:

A Community Referral Pilot Project

Abstract

Objective: The project was aimed to reduce the number of participants lost to primary care follow-up following a mobile health unit screening event.

Design: A pilot study program screening tool implementation was utilized to address the hidden barriers of the Social Determinants of Health (SDoH) during a Winter 2021 event.

Sample: A group of 12 participants were screened during a mobile health unit event. Eight of the participants opted to be a part of the pilot study.

Measurements: A comparison ratio of Primary Care follow up was compared from the Winter of 2020 with Winter of 2021, where the screening tool was implemented.

Intervention: A screening tool that addressed the hidden barriers of SDoH was provided and a referral through NCCare360 was provided electronically for those who opted into the study to have their identified needs met.

Results: Three out of eight participants followed up with a Primary Care Provider (PCP) in Winter 2021 event that utilized the screening tool to identify the hidden barriers of the SDoH, as opposed to one out of eight participants who followed up with a PCP in Winter 2020 event that did not use the screening tool. There was a 25% increase in PCP follow up with participants who used the screening tool during the Winter 2021 event.

Conclusion: More studies with larger sample sizes are needed to determine effectiveness of SDoH Screening Tool in future implementations. Making the hidden barriers of SDoH a regular part of screening in the healthcare setting could help bring awareness to the needs of those who are deemed non-compliant, preventing future loss in follow up with a PCP.

***Keywords*: Social Determinants of Health, Primary Care Provider, Barriers, Health disparities, Health Promotion**

Background

The purpose of this project was to reduce the number of patients lost to primary care follow-up after a community mobile health unit screening event. Free mobile health screening events in North Carolina were referring patients to a primary care provider once they screened positively for hypertension, diabetes, or high cholesterol through the Framingham Risk Assessment. Follow-up phone calls determined these patients were not following up with a Primary Care Provider, leading to a gap in continuity of care

Upon literature review, a research study on structural and hidden barriers to primary care suggested that community demographics which limited access to healthy food and exercise, lack of transportation, clinic and wait time, and diminished autonomy over healthcare contributed to poorer health outcomes and decreased access to Primary Care Providers (Freed et.al., 2013). According to Braveman and Gottlieb (2014), "despite gaps in current knowledge, the case for needing to address upstream socioeconomic factors is strong, and enough is known to inform interventions, which must be rigorously evaluated (para. 24)."

There is further need to increase trust and accessibility to healthcare through the establishment of a Primary Care Provider. The hidden barriers of the social determinants of health create healthcare disparities between vulnerable populations and further decrease trust in the healthcare community (Freed et.al., 2013). Good continuity of care with an established and accessible Primary Care Provider is associated with reduction in adverse associations between healthcare inequalities and overall health (Daniel & Kane, 2018). According to (Andermann, 2016, para. 3), "The social determinants of health include factors such as income, social support, early childhood development, education,

employment, housing, and gender." The healthcare community could look to the hidden barriers of the social determinants of health such as transportation, lack of food, lack of housing, and lack of safety as reasons for not following up, as opposed to labels such as non-compliance.

Method

A community referral pilot project was designed which utilized a screening tool (Appendix A) that addressed the hidden barriers of the social determinants of health (SDoH). The screening tool addressed access to food, housing, transportation, and interpersonal safety in a mobile health screening event. Patients were screened and upon permission referred to NCCare360, a statewide coordinated care network to electronically connect those with identified needs with community resources during a February, 2021 mobile health unit screening event.

The mobile health screening unit was held at Opportunities Industrialization Center (OIC) in a rural North Carolina town. Participants attended the community event on a voluntary basis. There was no charge for the referral process to primary care for those positively screened or for any screening tests on site. Permission was granted from the North Carolina Baptists on Mission (NCBM) mobile health unit to access the subjects, and a partnership with NCBM mobile heath unit was established to utilize the pilot project. Informed consent was obtained prior to health screening and SDoH assessment.

Information was provided in writing to all who opted to participate in the screening process. Participants were informed that regardless of their decision to participate in the pilot project, in consistency with the NC Baptist on Mission Mobile Screening Unit

policy, that referrals to primary care and/or community resources would be made as screening assessment indicated. Participants could opt out of the pilot study by not providing consent or not answering the SDoH assessment questionnaire assessment.

NCBM utilized the Framingham Risk Assessment screening questionnaire which collected the following data: demographic data (gender, age, race); health screening results for height/weight (BMI), HgBA1C, cholesterol and blood pressure as part of routine procedure. As indicated, a referral was made to a Primary Care Provider.

To conclude the screening process, the pilot project consisted of a SDoH screening tool provided through the North Carolina Department of Health and Human Services (NCDHHS) that addressed the barriers to healthcare such as access to food, transportation, housing, and safety. Any barriers identified were electronically entered into NCCare360 which was utilized as a referral resource to meet the needs of the identified barrier. NCCare360 required electronic signature from participants, which dually served as permission for agency to be contacted for referral and for their phone number to be used. Finally, participants provided permission for a phone number to be contacted to determine if they followed up with a Primary Care Provider within one month from screening event.

Follow up data was assessed within 30 days to determine follow up compliance with a Primary Care Provider. Data of primary care follow up rates were compared from Winter community 2020 with Winter event 2021 event to determine if addressing the hidden barriers of the SDoH reduced the number of patients lost to follow-up after a community health unit screening event.

Results

There were twelve participants in the MHU screening event of Winter 2021. Of the twelve participants, eight participated in the SDoH assessment screening tool. All eight participants qualified for a primary care referral, and three were determined to completed follow up with a Primary Care Provider.

There were eight participants screened and referred to a Primary Care Provider in the Winter 2020 comparison group. The Winter 2020 comparison group that did not utilize the screening tool which addressed the hidden barriers of the SDoH had eight participants, with one who completed primary care follow up. The limiting factor of the results is the small sample size in participants. However, there was determined to be a 25% increase in follow up compliance for the Winter 2021 that participated in the screening tool to address the hidden barriers of the SDoH.

These results aim to be presented at a formal presentation for Gardner-Webb University at Hunt School of Nursing Scholars Day and will be archived in GWU Dover Library electronic database. Results were shared with the NC Baptists on Mission Health Screening Ministry, and will be submitted for professional journal publication.

Discussion

The Winter 2021 pilot study demonstrated the screening tool that identified the hidden barriers of SDoH could be of benefit in future health unit screens to increase the likelihood of primary care follow up. Further research with larger sample sizes would be

recommended to further validate the improved primary care follow up with the SDoH barriers being addressed at the time of health screening.

Limitations such as bias, judgment, and lack of education on barriers to SDoH could be hindrances to the further development of similar pilot studies in the future. Education to discuss and determine the hidden barriers of healthcare could bring awareness in the medical community towards those labeled as non-compliant. According to (Phillips, et.al, 2020), "The social determinants of health (SDoH) are receiving considerable attention globally due to their tremendous influence in shaping health status, quality of life and health outcomes (para. 6)." There is a need for more of these projects to be utilized to determine more results. Consideration of the barriers in SDoH in other inpatient and outpatient healthcare settings could alleviate the label of non-compliance and provide growth for personal health autonomy and growth in the future for those being treated. Assessing the SDoH as hidden barriers to follow-up care may assist community referral agencies to provide services needed by the patient not commonly identified during a mobile screening event. Meeting these needs may improve primary care follow up allowing for better health care outcomes.

References

Andermann, A., & CLEAR Collaboration (2016). Taking action on the social determinants of health in clinical practice: a framework for health professionals. *CMAJ: Canadian Medical Association journal = journal de l'Association medicale Canadienne*, *188*(17-18), E474–E483. https://doi.org/10.1503/cmaj.160177

Braveman, P., & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public health reports (Washington, D.C.: 1974), 129 Suppl 2*(Suppl 2), 19–31. https://doi.org/10.1177/00333549141291S206

Daniel, H., Bornstein, S., & Kane, G. (2018, April 17). Addressing social determinants to improve patient care and promote health equity: An American College of Physicians position paper. ACP Journals. https://www.acpjournals.org/doi/10.7326/m17-2441

Freed, C. R., Hansberry, S. T., & Arrieta, M. I. (2013). Structural and hidden barriers to a local primary health care infrastructure: autonomy, decisions about primary health care, and the centrality and significance of power. *Research in the sociology of health care*, *31*, 57–81. https://doi.org/10.1108/S0275-4959(2013)0000031006

Phillips, J., Richard, A., Mayer, K., Shilkaitis, M., Fogg, L., & Vondracek, H. (2020, July 11). Integrating the social determinants of health into nursing practice: Nurses' perspectives. Sigma Theta Tau International. https://sigmapubs.onlinelibrary.wiley.com/doi/full/10.1111/jnu.12584

Appendix A

NC DHHS Healthy Opportunities

SDoH Screening Questions

We believe everyone should have the opportunity for health. Some things like not having enough food or reliable transportation or a safe place to live can make it hard to be healthy. Please answer the following questions to help us better understand you and your current situation. We may not be able to find resources for all of your needs, but we will try and help as much as we can.

	Yes	No
Food		
1. Within the past 12 months, did you worry that your food would run out before you got money to buy more?		
2. Within the past 12 months, did the food you bought just not last and you didn't have money to get more?		
Housing/ Utilities		
3. Within the past 12 months, have you ever stayed: outside, in a car, in a tent, in an overnight shelter, or temporarily in someone else's home (i.e. couch-surfing)?		
4. Are you worried about losing your housing?		
5. Within the past 12 months, have you been unable to get utilities (heat, electricity) when it was really needed?		
Transportation		
6. Within the past 12 months, has a lack of transportation kept you from medical appointments or from doing things needed for daily living?		
Interpersonal Safety		
7. Do you feel physically or emotionally unsafe where you currently live?		
8. Within the past 12 months, have you been hit, slapped, kicked or otherwise physically hurt by anyone?		
9. Within the past 12 months, have you been humiliated or emotionally abused by anyone?		
Optional: Immediate Need		
10. Are any of your needs urgent? For example, you don't have food for tonight, you don't have a place to sleep tonight, you are afraid you will get hurt if you go home today.		
11. Would you like help with any of the needs that you have identified?		